HardwareHighlights

BHMA
builders hardware manufacturers association

ANSI/BHMA A156.30-2007

American National Standard for High Security Cylinders

Standard ANSI/BHMA A156.30-2007 establishes requirements for both mechanical and electrified high security cylinders. For further information, consult the full standard, ANSI/BHMA A156.30 for High Security Cylinders.

BHMA has created this series of *Hardware Highlights* to provide useful, accessible information about builders hardware for anyone with an interest in devices that hang, control, secure, and trim the doors. BHMA is the trade association which represents almost all of the North American manufacturers of builders hardware. One of its main activities since 1983 has been the development and maintenance of ANSI-approved standards for 35 separate product categories.

Product Performance: Purchasers of bored locks certified to A156.30 (http://buildershardware.com/cpd) can be assured products will perform to their expectations.

Below are an explanation and some examples of the evaluations conducted for certification:

KEY CONTROL	DESTRUCTIVE TESTS	SURREPTITIOUS TESTS
This feature is intended to provide security by limiting the availability of unauthorized keys or unauthorized electronic credentials that would operate the locks. Three levels of each attribute describe increasingly higher protection, with level "C" as the highest. Specific attributes include key blank control, cylinder marking restrictions, and electronic audit trail and timing zone capability.	These tests ensure resistance to several methods of destructive attach, including a cylinder plug static pull test, cylinder plug impact pull resistance, application of torque in an attempt to gain entry, and a drill resistance test for a duration of 5 minutes total for level "B", and ten minutes for the highest level "C". After testing, the lock driving element of the cylinders shall not rotate without the correct key.	Resistance to a number of surreptitious attack methods is evaluated through setting minimum key changes, mechanical key biting step limitations, mechanical pick resistance through either decoding or picking, and electrical pick resistance through over voltage, EDS, magnet, or conductive liquids. Finally, there is a mechanical security tolerance test of up to 100,000 cycles to gain the highest level rating "C".

Building Codes Builders hardware provides several attributes that are essential to building safety and performance, including egress and fire protection. BHMA locksets are designed to comply with all applicable requirements.

Sustainability Builders hardware contributes to building sustainability through their verified durability, as well as material characteristics such as recycled content and recyclability. The reliable closing and sealing of openings can also contribute to energy conservation. BHMA has developed Product Category Rules, which will further define sustainability requirements and guide life cycle assessments and environmental performance declarations.

Function Numbers: Another significant contribution of standards for product specification is a numbering system for lock function. Please consult A156.30 for the full list; an example is provided here:

To declare level "A", all features within the category must achieve level "A". To declare level "B", all features within the category must achieve at least a "B"; similar for Category "C".

The minimum listing requires at least a "C" in each category.

The Suffix E (electrical) or M (mechanical) is applied to denote the type of cylinder.

Example:
M1ACAE is a grade 1 electrical cylinder meeting levels A, C, and A respectively.